Title (en)

Gate driving circuit, array substrate, and display apparatus

Title (de)

Gate-Treiberschaltung, Arraysubstrat und Anzeigevorrichtung

Title (fr)

Circuit de commande de porte, substrat de réseau et appareil d'affichage

Publication

EP 2711921 A1 20140326 (EN)

Application

EP 13184232 A 20130913

Priority

CN 201220482889 U 20120920

Abstract (en)

The present disclosure relates to a field of displaying, and particularly to a gate driving circuit, an array substrate, and a display apparatus capable of ensuring that noise can be pulled down immediately once it occurs, and thus increasing a quality of picture and reliability of the display apparatus. The gate driving circuit includes a plurality of cascaded shift registers, wherein an output terminal of the shift register is further connected to two Thin Film Transistors TFTs, wherein sources of the two TFTs are both connected to the output terminal of the shift register, drains of the two TFTs are both connected to a first level signal line VSS, and gates of the two TFTs are input to different control signals respectively, thus ensuring that at least one TFT is turned on when the shift register outputs a switching-off voltage.

IPC 8 full level

G09G 3/3266 (2016.01); **G09G 3/36** (2006.01); **G11C 19/28** (2006.01)

CPC (source: EP KR US)

G09G 3/20 (2013.01 - KR); **G09G 3/3266** (2013.01 - EP US); **G09G 3/3677** (2013.01 - EP US); **G09G 3/3696** (2013.01 - US); **G11C 19/287** (2013.01 - EP US); G09G 2310/0267 (2013.01 - EP US); G09G 2310/0286 (2013.01 - EP US); G09G 2320/043 (2013.01 - EP US)

Citation (search report)

[XA] US 2010238143 A1 20100923 - LIU SHENG-CHAO [TW], et al

Cited by

CN110010078A; US10147378B2; US10885861B2; US11636819B2

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2711921 A1 20140326; **EP 2711921 B1 20170712**; CN 202838908 U 20130327; JP 2014063164 A 20140410; JP 6239325 B2 20171129; KR 101521706 B1 20150519; KR 20140038318 A 20140328; US 2014078124 A1 20140320; US 9218780 B2 20151222

DOCDB simple family (application)

EP 13184232 A 20130913; CN 201220482889 U 20120920; JP 2013193973 A 20130919; KR 20130110379 A 20130913; US 201314025112 A 20130912